

Literaturverzeichnis

Hamburger Ärzteblatt 3 | 2023

Seite 1

Weidestr. 122 b

22083 Hamburg

Redaktion

E-Mail: verlag@aekhh.de

Tel.: (040) 20 22 99 – 205

Fax: (040) 20 22 99 – 400

S. 12 – 17: Biologika – wie sie die Medizin verändern.

Von Prof. Dr. Rainer Böger, PD Dr. Juliane Hannemann

Zusätzliche Tabelle, Seite 13 und 14:

[Tabelle 1 erweitert um Indikationsgebiete von monoklonalen Antikörpern nach der Erstzulassung:](#)

(<http://bitly.ws/B64K>)

1. AVR. Arzneiverordnungsreport-Report 2021. Ludwig W-DM, B; Seifert, R (editors): Springer Berlin, Heidelberg; 2021.
2. Wang W, Wang EQ, Balthasar JP. Monoclonal antibody pharmacokinetics and pharmacodynamics. Clin Pharmacol Ther. 2008;84(5):548-58.
3. Castelli MS, McGonigle P, Hornby PJ. The pharmacology and therapeutic applications of monoclonal antibodies. Pharmacol Res Perspect. 2019;7(6):e00535.
4. Köhler G, Milstein C. Continuous cultures of fused cells secreting antibody of predefined specificity. Nature. 1975;256(5517):495-7.
5. Roth KDR, Wenzel EV, Ruschig M, Steinke S, Langreder N, Heine PA et al. Developing Recombinant Antibodies by Phage Display Against Infectious Diseases and Toxins for Diagnostics and Therapy. Front Cell Infect Microbiol. 2021;11:697876.
6. Nixon AE, Sexton DJ, Ladner RC. Drugs derived from phage display: from candidate identification to clinical practice. MAbs. 2014;6(1):73-85.
7. Hirsch C, Park YS, Piechotta V, Chai KL, Estcourt LJ, Monsef I et al. SARS-CoV-2-neutralising monoclonal antibodies to prevent COVID-19. Cochrane Database Syst Rev. 2022;6(6):Cd014945.
8. Zhang J, Zhang H, Sun L. Therapeutic antibodies for COVID-19: is a new age of IgM, IgA and bispecific antibodies coming? MAbs. 2022;14(1):2031483.
9. Corti D, Purcell LA, Snell G, Vesler D. Tackling COVID-19 with neutralizing monoclonal antibodies. Cell. 2021;184(12):3086-108.
10. Guimaraes Koch SS, Thorpe R, Kawasaki N, Lefranc MP, Malan S, Martin ACR et al. International nonproprietary names for monoclonal antibodies: an evolving nomenclature system. MAbs. 2022;14(1):2075078.
11. Balocco R, De Sousa Guimaraes Koch S, Thorpe R, Weisser K, Malan S. New INN nomenclature for monoclonal antibodies. Lancet. 2022;399(10319):24.
12. Lobo ED, Hansen RJ, Balthasar JP. Antibody pharmacokinetics and pharmacodynamics. J Pharm Sci. 2004;93(11):2645-68.
13. Junghans RP. Finally! The Brambell receptor (FcRB). Mediator of transmission of immunity and protection from catabolism for IgG. Immunol Res. 1997;16(1):29-57.
14. Keizer RJ, Huitema AD, Schellens JH, Beijnen JH. Clinical pharmacokinetics of therapeutic monoclonal antibodies. Clin Pharmacokinet. 2010;49(8):493-507.
15. Wurster U, Haas J. Passage of intravenous immunoglobulin and interaction with the CNS. J Neurol Neurosurg Psychiatry. 1994;57 Suppl(Suppl):21-5.
16. Reff ME, Heard C. A review of modifications to recombinant antibodies: attempt to increase efficacy in oncology applications. Crit Rev Oncol Hematol. 2001;40(1):25-35.
17. Thurber GM, Schmidt MM, Wittrup KD. Factors determining antibody distribution in tumors. Trends Pharmacol Sci. 2008;29(2):57-61.
18. Levy G. Pharmacologic target-mediated drug disposition. Clin Pharmacol Ther. 1994;56(3):248-52.
19. Junghans RP, Anderson CL. The protection receptor for IgG catabolism is the beta2-microglobulin-containing neonatal intestinal transport receptor. Proc Natl Acad Sci U S A. 1996;93(11):5512-6.

Literaturverzeichnis

Hamburger Ärzteblatt 3 | 2023

Seite 2

Weidestr. 122 b

22083 Hamburg

Redaktion

E-Mail: verlag@aekeh.de

Tel.: (040) 20 22 99 – 205

Fax: (040) 20 22 99 – 400

20. Kimball JA, Norman DJ, Shield CF, Schroeder TJ, Lisi P, Garovoy M et al. The OKT3 Antibody Response Study: a multicentre study of human anti-mouse antibody (HAMA) production following OKT3 use in solid organ transplantation. *Transpl Immunol.* 1995;3(3):212-21.
21. Bendtzen K, Geborek P, Svenson M, Larsson L, Kapetanovic MC, Saxne T. Individualized monitoring of drug bioavailability and immunogenicity in rheumatoid arthritis patients treated with the tumor necrosis factor alpha inhibitor infliximab. *Arthritis Rheum.* 2006;54(12):3782-9.
22. Ducourau E, Mulleman D, Paintaud G, Miow Lin DC, Lauféron F, Ternant D et al. Antibodies toward infliximab are associated with low infliximab concentration at treatment initiation and poor infliximab maintenance in rheumatic diseases. *Arthritis Res Ther.* 2011;13(3):R105.
23. Cantini F, Niccoli L, Goletti D. Adalimumab, etanercept, infliximab, and the risk of tuberculosis: data from clinical trials, national registries, and postmarketing surveillance. *J Rheumatol Suppl.* 2014;91:47-55.
24. Dobler CC. Biologic Agents and Tuberculosis. *Microbiol Spectr.* 2016;4(6).
25. Seitz K, Zhou H. Pharmacokinetic drug-drug interaction potentials for therapeutic monoclonal antibodies: reality check. *J Clin Pharmacol.* 2007;47(9):1104-18.
26. AkdÄ Arzneimittelkommission der Deutschen Ärzteschaft. Empfehlungen der AkdÄ zur Behandlung mit Biosimilars. *Arzneiverordnung in der Praxis* 2017;44(4):210-4 2017. Available from: www.akdae.de/Arzneimitteltherapie/AVP/Artikel/201704/210.pdf (letzter Aufruf: 20.11.2022).
27. AkdÄ Arzneimittelkommission der Deutschen Ärzteschaft. Biosimilars. Leitfaden der AkdÄ. Arzneimittelkommission der deutschen Ärzteschaft, Berlin. 2. Auflage. 2021 2021. Available from: www.akdae.de/Arzneimitteltherapie/LF/PDF/Biosimilars.pdf (letzter Aufruf: 20.11.2022)

Angaben zu möglichen Interessenkonflikten: keine

S. 24 – 26: LIVE: innovatives Verfahren zur Post-Infarkttherapie.

Von Prof. Dr. Thorsten Hanke, PD Dr. Michael Laß

Link: [OP-Video zum LIVE-Verfahren: \(http://bitly.ws/B62Y\)](http://bitly.ws/B62Y)

1. Deutscher Herzbericht 2020
2. Cohn JN, Ferrari R, Sharpe N. Cardiac remodeling--concepts and clinical implications: a consensus paper from an international forum on cardiac remodeling. Behalf of an International Forum on Cardiac Remodeling. *J Am Coll Cardiol.* 2000 Mar 1;35(3):569-82.
3. Richardson WJ, Clarke SA, Quinn TA, Holmes JW. Physiological Implications of Myocardial Scar Structure. *Compr Physiol.* 2015 Sep 20;5(4):1877-909.
4. Sutton MG, Sharpe N. Left ventricular remodeling after myocardial infarction: pathophysiology and therapy. *Circulation.* 2000 Jun 27;101(25):2981-8.
5. Masci PG, Ganame J, Francone M et al. Relationship between location and size of myocardial infarction and their reciprocal influences on post-infarction left ventricular remodeling. *Eur Heart J.* 2011;32(13):1640-1648.
6. Stone GW, Selker HP, Thiele H et al. Relationship Between Infarct Size and Outcomes Following Primary PCI: Patient-Level Analysis From 10 Randomized Trials. *J Am Coll Cardiol.* 2016;67(14):1674-1683.

Literaturverzeichnis

Hamburger Ärzteblatt 3 | 2023

Seite 3

Weidestr. 122 b

22083 Hamburg

Redaktion

E-Mail: verlag@aekhh.de

Tel.: (040) 20 22 99 – 205

Fax: (040) 20 22 99 – 400

- McDonagh TA, Metra M, Adamo M, Gardner RS, Baumbach A, Böhm M, Burri H, Butler J, Čelutkienė J, Chioncel O, Cleland JGF, Coats AJS, Crespo-Leiro MG, Farmakis D, Gilard M, Heymans S, Hoes AW, Jaarsma T, Jankowska EA, Lainscak M, Lam CSP, Lyon AR, McMurray JJV, Mebazaa A, Mindham R, Muneretto C, Francesco Piepoli M, Price S, Rosano GMC, Ruschitzka F, Kathrine Skibelund A. ESC Scientific Document Group. Eur Heart J. 2021 Sep 21;42(36):3599-3726.
- Jones RH, Velazquez EJ, Michler RE, Sopko G, Oh JK, O'Connor CM, Hill JA, Menicanti L, Sadowski Z, Desvigne-Nickens P, Rouleau JL, Lee KL. STICH Hypothesis 2 Investigators (2009) Coronary bypass surgery with or without surgical ventricular reconstruction. N Engl J Med. 360(17):1705-1717.
- Sousa-Uva M, Neumann FJ, Ahlsson A et al. 2018 ESC/EACTS Guidelines on myocardial revascularization. Eur J Cardiothorac Surg. 2019;55(1):4-90.
- Popov AF, Hanke T. LIVE™ – eine innovative Option zur minimal-invasiven Infarkttherapie durch operative Ventrikelrekonstruktion ohne Herz-Lungen-Maschine. Z Herz- Thorax- Gefäßschir 36. 2022;129-136.
- Neves P, Pillay T, Annest L, van Bladel K, Kaiser E, Stahl F, Hanke T, Swaans M, Klein P, Ruf T, von Bardeleben RS. Patient selection for LIVE therapy: From clinical indications to multimodality imaging individual case planning. Echocardiography. 2021 38(9):1482-1488. doi: 10.1111/echo.15182. Epub 2021 Sep 9.
- Klein P, Anker SD, Wechsler A, Skalsky I, Neuzil P, Annest LS, Bifi M, McDonagh T, Frerker C, Schmidt T, Sievert H, Demaria AN, Kelle S (2019). Less invasive ventricular reconstruction for ischaemic heart failure. Eur J Heart Fail 21(12):1638-1650.
- Naar J, Skalský I, Krüger A, Málek F, Van Bladel K, Annest LS, Moučka P, Mráz T, Reddy VY, Neuzil PJ Long-Term Results of Hybrid Left Ventricular Reconstruction in the Treatment of Ischemic Cardiomyopathy. Cardiovasc Transl Res. 2021 14(6):1043-1050.

Angaben zu möglichen Interessenkonflikten: vorhanden

Prof. Dr. Thorsten Hanke tritt als Co-Autor in Studien zum Thema LIVE-Therapie auf.

S. 28 – 29: Der besondere Fall: Schwere Gicht: ein unterschätztes Krankheitsbild.

Von Dr. Thomas Kraus, Urs-Alexander Bölke, Prof. Dr. Karsten Sydow, Dr. Matthias Janneck

- Zhang W, Doherty M, Bardin T et al. EULAR evidence based recommendations for gout. Part I: Diagnosis. Report of a task force of the standing Committee for International Clinical Studies Including Therapeutics (ESCISIT). Annals of the Rheumatic Diseases 2006;65:1301-11.
- Singh JA, Gaffo A. Gout epidemiology and comorbidities. Seminars in Arthritis and Rheumatism 2020;50:11/16.
- Neogi T, Jansen TL, Dalbeth N, Fransen J, Schumacher HR et al. 2015 Gout Classification Criteria: an American College of Rheumatology / European League Against Rheumatism collaborative initiative. Arthritis & Rheumatology 2015;67(10): 2557-68.
- Jordan RW, Khan SA. The management of gout in primary care. InnovAiT 2012;5:503-8.
- Schlesinger N, Norquist JM, Watson DJ. Serum urate during acute gout. Journal of Rheumatology 2009;36(6):1287-9.
- Campion EW, Glynn RJ, DeLabry LO. Asymptomatic hyperuricemia. Risks and consequences in the Normative Aging Study. The American journal of Medicine 1987;82(3):421-6.
- Doherty M, Jansen TL, Nuki G, Pascual E, Perez-Ruiz F et al. Gout: why is this curable disease so seldom cured. Annals of Rheumatic Diseases 2012;71(11):1765–70.

Literaturverzeichnis

Hamburger Ärzteblatt 3 | 2023

Seite 4

Weidestr. 122 b
22083 Hamburg
Redaktion

E-Mail: verlag@aekhh.de

Tel.: (040) 20 22 99 – 205

Fax: (040) 20 22 99 – 400

8. Gutman AB. The past four decades of progress in the knowledge of gout, with an assessment of the present status. *Arthritis & Rheumatology* 1973;16(4):431-45.
9. Dalbeth N, Stamp L. Hyperuricaemia and gout: time for a new staging system? *Annals of Rheumatic Disease* 2014;73(9): 1598-600.
10. Kiltz U, Alten R, Fleck M, Krüger K, Manger B et al. Langfassung zur S2e-Leitlinie Gichtarthritis (fachärztlich). Evidenzbasierte Leitlinie der Deutschen Gesellschaft für Rheumatologie (DGRh). *Zeitschrift für Rheumatologie* 2016;75:12.
11. Bhole V, de Vera M, Rahman MM, Krishnan E, Choi H. Epidemiology of gout in women: fifty-two-year followup of a prospective cohort. *Arthritis & Rheumatology* 2010; 62:069-76.
12. Choi HK, Atkinson K, Karlson EW, Curhan G. Obesity, weight change, hypertension, diuretic use, and risk of gout in men: the health professionals follow-up study. *Archives of Internal Medicine* 2005; 65:742-8.
13. Choi HK, Curhan G. Independent impact of gout on mortality and risk for coronary heart disease. *Circulation* 2007;116: 894-900.
14. Hak AE, Curhan GC, Grodstein F, Choi HK. Menopause, postmenopausal hormone use and risk of incident gout. *Annals of Rheumatism Diseases* 2010;69:1305-9.
15. Arromdee E, Michet CJ, Crowson CS, O'Fallon WM, Gabriel SE. Epidemiology of gout: is the incidence rising? *Journal of Rheumatology* 2002;29:2403-6.
16. Akkineni R, Lee A, Miller KL, Tosteson ANA, Choi HK, Zhu Y et al. Does treatment of asymptomatic hyperuricemia improve cardio and neurovascular outcomes? A decision-analytic evaluation. *Arthritis & Rheumatology* 2011:63.
17. Roughley M, Sultan AA, Clarson L, Muller S, Whittle R, Belcher J et al. Risk of chronic kidney disease in patients with gout and the impact of urate lowering therapy: a population-based cohort study. *Arthritis Research and Therapy* 2018;20: 243.
18. So AK, Martinon F. Inflammation in gout: mechanisms and therapeutic targets. *Nature Reviews Rheumatology* 2017;13:639-47.
19. Martinon F, Pettrilli V, Mayor A, Tardivel A, Tschopp J. Gout-associated uric acid crystals activate the NALP3 inflammasome. *Nature* 2006;440(7081):237-41.
20. Popa-Nita O, Naccache PH. Crystal-induced neutrophil activation. *Immunology & Cell Biology* 2010;88(1):32-40.
21. Pillinger MH, Mandell BF. Therapeutic approaches in the treatment of gout. *Seminars in Arthritis and Rheumatism* 2020. 50:24-30.
22. Khanna D, Khanna PP, Fitzgerald JD, Singh MK, Bae S et al. 2012 American College of Rheumatology guidelines for management of gout. Part 2: therapy and antiinflammatory prophylaxis of acute gouty arthritis. *Arthritis Care & Research* 2012;64(10):1447-61.
23. Fernandez C et al. Treatment of acute attacks of gout with a small dose of intraarticular triamcinolone acetonide. *Journal of Rheumatology* 1999;26(10):2285-6.
24. Komatsu T. Treatment of acute gouty attack with local infiltration of Kenacort-A and the study of gout and hyperuricemia at the Tanabe National Hospital during 1967. *Iryo*, 1969;23(1):54-61.
25. Wortmann R, MacDonald P, Hunt B, Jackson R. Effect of prophylaxis on gout flares after the initiation of urate-lowering therapy: analysis of data from three phase III trials. *Clinical Therapy* 2010;32:2386-97.
26. Schumacher R, Becker M, Wortmann R et al. Effects of Febuxostat versus allopurinol and placebo in reducing serum urate in subjects with hyperuricemia and gout: A 28-week, phase III, randomized, double-blind, parallel-group trial. *Arthritis & Rheumatology* 2008;59:1540-8.

Literaturverzeichnis

Hamburger Ärzteblatt 3 | 2023

Seite 5

Weidestr. 122 b

22083 Hamburg

Redaktion

E-Mail: verlag@aekhh.de

Tel.: (040) 20 22 99 – 205

Fax: (040) 20 22 99 – 400

27. Khanna D, Fitzgerald JD, Khanna PP, Bae S, Singh MK, Neogi T et al. 2012 American College of Rheumatology guidelines for management of gout. Part 1: systematic nonpharmacologic and pharmacologic therapeutic approaches to hyperuricemia. *Arthritis Care & Research* 2012;64:1431-46.
28. Stamp LK, Chapman PT, Barclay M, Horne A, Frampton C, Tan P et al. The safety and efficacy of allopurinol dose escalation in people with gout, a randomised controlled trial. *Arthritis & Rheumatology* 2016;68:264-5.
29. Richette P, Doherty M, Pascual E, Barskova V, Becce F, Castaneda-Sanabria J et al. 2016 updated EULAR evidence-based recommendations for the management of gout. *Annals of Rheumatic Diseases* 2017;76:29-42.
30. Richette P et al. Updated Eular evidence-based recommendations for gout. Part II: management. *Annals of Rheumatic diseases* 2016;73:2.
31. Taylor TH et al. Initiation of allopurinol at first medical contact for acute attacks of gout: a randomized clinical trial. *American Journal of Medicine* 2012;125(11):1126-1134.

Angaben zu möglichen Interessenkonflikten: keine

S. 32 – 33: Bilder aus der klinischen Medizin: Ungewöhnliche Ursache einer chronischen Blutungsanämie.

Von Dr. Claudia Schröder, Prof. Dr. Guntram Lock

1. Cesarman E, Damania B, Krown SE, Martin J, Bower M, Whitby D. Kaposi sarcoma. *Nat Rev Dis Primers*. 2019 Jan 31;5(1):9. doi: 10.1038/s41572-019-0060-9. PMID: 30705286; PMCID: PMC6685213.
2. Laine L, Amerian J, Rarick M, Harb M, Gill PS. The response of symptomatic gastrointestinal Kaposi's sarcoma to chemotherapy: a prospective evaluation using an endoscopic method of disease quantification. *Am J Gastroenterol*. 1990 Aug;85(8):959-61. PMID: 1695812.
3. Weprin L, Zollinger R, Clausen K, Thomas FB. Kaposi's sarcoma: endoscopic observations of gastric and colon involvement. *J Clin Gastroenterol*. 1982 Aug;4(4):357-60. PMID: 7119413.